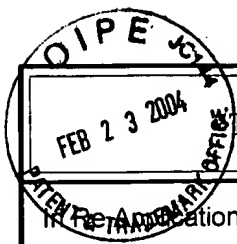


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TRANSMITTAL OF APPEAL BRIEF (Small Entity)

Docket No.  
ICT-10002/03

In Patent Application Of: Melvin H. Sachs et al

Serial No.	Filing Date	Examiner	Group Art Unit
09/930,042	August 15, 2001	Steve M. Varner	3635

Invention: COMPOSITE COLUMN AND BEAM FRAMING MEMBERS FOR BUILDING CONSTRUCTION

TO THE COMMISSIONER FOR PATENTS:

Transmitted herewith in triplicate is the Appeal Brief in this application, with respect to the Notice of Appeal filed on:

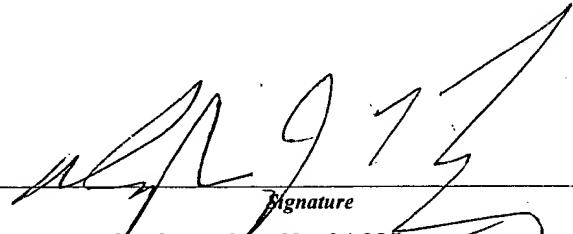
Applicant is a small entity under 37 CFR 1.9 and 1.27.

A verified statement of small entity status under 37 CFR 1.27:


- ☐ is enclosed.
- ☐ has already been filed in this application.

The fee for filing this Appeal Brief is: \$165.00

- ☒ A check in the amount of the fee is enclosed.
- ☐ The Director has already been authorized to charge fees in this application to a Deposit Account.
- ☒ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 07-1180

  
Signature  
Douglas J. McEvoy, Reg. No. 34,385  
Gifford, Krass, Groh, Sprinkle, Anderson  
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Dated: February 23, 2004

I certify that this document and fee is being deposited on <u>2/23/04</u> with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. <u>EV 394968111 US</u>
 Signature of Person Mailing Correspondence
Judith T. Lange Typed or Printed Name of Person Mailing Correspondence

CC:



Attorney Docket No.: ICT-10002/03

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants: Melvin H. Sachs et al.

Serial No.: 09/930,042

Examiner: Steve M. Varner

Filed: August 15, 2001

Group Art Unit: 3635

For: COMPOSITE COLUMN AND BEAM FRAMING  
MEMBERS FOR BUILDING CONSTRUCTION

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**APPEAL BRIEF**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450  
Attention: Board of Patent Appeals

Dear Sir or Madam:

Responsive to the Final Office Action dated September 25, 2003 and the Notice of Appeal filed on December 22, 2003, Applicant appeals the final rejection of the present application. Attached hereto is Applicant's Notice of Appeal. Applicant further avers as follows:

**1.0 Real Party-in-Interest.**

The parties named in the caption of this brief, i.e., Melvin H. Sachs and Gerald W. Burek, are joint inventors.

**2.0 Related Appeals and Interferences.**

No other appeals or interferences are known by Applicant to be pending and which will have any effect on the Board's decision in the pending appeal.

### **3.0 Status of Claims.**

Claims 1, 3-17 and 19 remain pending in the application, claims 2 and 18 having been previously cancelled, and are the subject of this appeal.

### **4.0 Status of Amendments.**

Amendment A was filed in the application on July 14, 2003, responsive to the Examiner's Office Action mailed March 14, 2003.

### **5.0 Summary of the Invention.**

The present invention, defined in the claims involved in this appeal, is a composite column and beam framing member system 10 (page 6, line 15, Fig. 1) including a column 12 (page 6, line 16, Fig. 1) and beam 14 (page 6, line 14, Fig. 1) framing members. The column 12 includes first 16 and second 18 elongated and generally "U" shaped shells (page 6, lines 17 and 18, Fig. 1) and the beam 14 first 20 and second 22 elongated and generally "L" shaped shells (page 6, line 19, Fig. 1).

Reinforcing members (rebars) 24 (page 6, line 20, Fig. 1) are secured (such as either by welding or, in the case of horizontal extension, by spacers) within an interior of each of the shells 16, 18, 20 and 22, this again including both vertically extending rebars 24 associated with the assembled column 12 as well as additional horizontally extending rebars 24 associated with the assembled beam 14. Following insertion of the rebars, a protective coating 26 (page 6, line 22, Fig. 1) is applied to the inner surfaces of any or all of the channels defined in the shells 16-22 and the shells are then secured together, such as by welding (page 8, line 16) and filled with a filler material 23 (page 7, line 1, Fig. 1, page 8, line 21) such as a concrete to provide structural support to the column. Referring to page 8, lines 1-13, beam 14 is constructed in substantially the same fashion as for the column 12 described above and includes welding the "L" shaped

shells 20 and 22 together, applying the inner protective coating 26, following which is applied the filler material 23 (see again Fig. 1).

A first variant 14' of the beam framing member (page 9, line 21, Figs. 6 and 7) includes a first taller base 70 of a shell 20' and a second interengageable and shorter base 71 of a corresponding shell 22'. The base 70 of the first shell 20' is preferably wider than the base 71 of the second shell 22' such that a floor or roof system 110 (page 10, line 5, Fig. 7) may be adapted to abut against the first shell 20' while being supported by the beam 14'.

A method for constructing a framing member in accordance with the invention (pages 10-11) includes the steps of providing a first and second shell member, positioning at least one reinforcing member within an interior channel of each shell member, and applying a fire-protective material onto the interior channel of each shell member. Additional steps include securing the first shell member to the second shell member to form a complete framing member having an interior volume, and filling the interior volume of the framing member with a filler material.

## **6.0 Issues.**

The issues presented for review are the Examiner's rejection of claims 1, 3-6, 10 and 16-19 under 35 USC §103(a) as obvious over Wilnau (4,409,764) in view of Kubica (6,349,520), the rejection of claim 17 as obvious over Wilnau, and the rejection of claims 7-9 and 11-15 as obvious over Wilnau in view of Kubica and further in view of Applicant's disclosure.

## **7.0 Grouping of Claims.**

Claims 1, 3-6, 10 and 16-19 form a single grouping of claims and stand and fall together.

## **8.0 Argument**

### **Group I – Claims 1, 3-6, 10 and 16-19.**

The Examiner cited Wilnau and Kubica references, either alone or in combination with the applicant's own disclosure, against the claims in the application. In relevant point, the Examiner has argued that it would be obvious to combine the teachings of the interengageable and flanged channel members (such as for example those illustrated at 211 and 212 in the variant of Fig. 18), with the insulating panel 18 in Kubica, as teaching the provision of the protective material disposed on the interior surface of the inner shells and prior to the insertion of the reinforcing members (rebars) and subsequent application of the filler material.

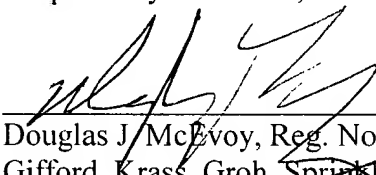
Simply put, Applicant respectfully disagrees with the Examiner's assertion that the rigid insulating panels 18 in Kubica teaches the layer of protective material, again at 26, applied to the inner facing surfaces of the assembled and elongated shells. Specifically, Kubica discloses insulating panels 18 positioned adjacent to interior surfaces (and in sandwiching fashion) along one of a roll of wall forms 12. The panels further comprise solid structural elements exhibiting grooves 20 formed in opposing vertical edges and which in turn engage within elongated edges 28 of associated retaining strips 22.

Accordingly, the panels 18 do not teach or suggest the recitation, in each of independent claims 1, 17 and 19, of the protective material disposed on the interior surface of at least one of the shells. Rather again, the panel 18 in Kubica is employed in a spaced apart and sandwiching arrangement between (see also spacer wall ties 16) unrelated to any application within the inner wall surfaces of a concrete form construction, and such as is either disclosed in the claims of the present application or in the teachings of Wilnau.

Applicant again respectfully submits that, aside again from the obvious differences between the rigid panels 18 in Kubica and the protective material 26 (again claims 1, 17 and 19), there is again no teaching or suggestion to apply the panels 18 in the manner recited in the claims (again in disposed fashion within interior surfaces of at least one of the shells) and prior to filling the interior with a filler material of a different composition than the protective material. It is further respectfully submitted that the combination of Wilnau and Kubica amounts to a hindsight reconstruction of the invention.

For these reasons it is submitted that the claims are allowable and favorable action is respectfully requested.

Respectfully submitted,



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## **9.0 Appendix**

1. A structural framing member comprising:

a first shell member and a structurally separate second shell member each being elongated so as to have a length dimension which is greater than a width dimension, each shell having an interior surface and including one substantially open side extending along said length dimension, each shell being configured so that said first shell member is securable to said second shell member so that said substantially open sides of said first and second shell members are at least partially contiguous and said first and second shell members cooperate to define an interior volume;

a protective material disposed on the interior surface of at least one of said shells;

at least one reinforcing member positioned within said interior volume defined by said first and second shell member; and

a filler material disposed within said interior volume to secure said reinforcing member within said interior volume and wherein said filler material is of a different composition than said protective material.

3. The structural framing member of claim 1, wherein said first and second shell are generally u-shaped.

4. The structural framing member of claim 1, wherein said filler material is concrete.

5. The structural framing member of claim 1, wherein said first and second shells are generally l-shaped.



6. The structural framing member of claim 1, wherein a base of said first shell is wider than a base of said second shell.

10. The structural framing member of claim 2, wherein said fire protective material is a heat sink material.

16. The structural framing member of claim 2, wherein said protective material is a thermal insulation material.

17. A method for manufacturing a structural frame comprising:  
providing a first shell member and a structurally separate second shell member each being elongated so as to have a length dimension which is greater than a width dimension, each shell member including one substantially open side extending along said length dimension and defining an interior channel;

applying a protective material to said interior surface of said at least one shell member;

securing said first shell member to said second shell member at least partially along said substantially open side so that the interior channels of the first and second shell members cooperate to define an interior volume;

positioning at least one reinforcing member within each of said interior channels of said first and second shell member; and

filling said interior volume defined by said first and second shell member with a filler material having a different composition from said protective material so that said reinforcing members are secured within said interior volume.

19. A structural framing member comprising:

a first shell member and a structurally separate second shell member each being elongated so as to have a length dimension which is greater than a width dimension, each shell having an interior surface and including one substantially open side extending along said length dimension, each shell being configured so that said first shell member is securable to said second shell member so that said substantially open sides of said first and second shell members are at least partially contiguous and said first and second shell members cooperate to define an interior volume;

at least one spacing bar affixed to the interior surface of said first and second shell member;

a protective material applied on the interior surface of each of said shell members;

at least one reinforcing member disposed within the interior volume defined by said shell members; and

a filler material disposed within the interior volume to secure said at least one reinforcing member within the interior volume wherein said filler material is a different composition from said protective material.